

**REMARKS**

In response to the Office Action dated October 26, 2004, Applicant respectfully requests reconsideration and withdrawal of the rejections.

The rejection of the claims under the first paragraph of 35 U.S.C. §112 was maintained, on the grounds that the application does not define Cases 2 and 4, and that "Case 1 and 3 are missing." As pointed out in Applicant's previous response, these various cases are defined in ISO 7816-4, which is explicitly referenced in the application. Since this publication defines the standards that apply to smart cards, knowledge of these cases would be expected of one having an ordinary level of skill in the relevant technology. Contrary to the assertion in the Office Action, the statute does not require all of the details of the standard to be set forth in the specification. As stated by the predecessor to the CAFC, "It must be borne in mind that the disclosure need not only be full, clear and exact to satisfy the statute, it must also be concise, and that the disclosure is directed to those skilled in the art...It is not required that every nut, bolt and rivet actually used in mechanical inventions be described, or, in chemical cases, that the electron orbital patterns for a claimed compound be set forth." *In re Knowlton*, 178 U.S.P.Q. 486 (CCPA 1973).

As pointed out in the Office Action, the first paragraph of 35 U.S.C. § 112 requires a written description which reasonably conveys that the Applicant had possession of the *claimed* invention at the time the application was filed. The claimed subject matter deals with the specific manner in which to handle ADPU commands for Cases 2 and 4 in the emulation of a PCSC reader. Cases 1 and 3 are inconsequential, as far as the *claimed* subject matter is concerned. Hence, their absence from the specification does not violate the requirements of the statute.

Nevertheless, to advance the prosecution of the application, the specification has been amended to explain the differences between Cases 2 and 4, on one hand, and Cases 1 and 3 on the other hand. It is respectfully submitted that this amendment does not present new matter, since it is directly derived from ISO 7816-4, which is explicitly referenced in the application.

Claim 3 was rejected under the second paragraph of 35 U.S.C. §112, on the grounds that the Examiner was unclear regarding the notation "(c<sub>1</sub>)". This notation is employed to indicate that the step recited in claim 3 follows step (c) appearing in parent claim 1. If the Examiner believes that the notation is confusing, he is authorized to cancel the term "(c<sub>1</sub>)" via Examiner's amendment.

Claims 1-4 were rejected under 35 U.S.C. §103, on the grounds that they were considered to be unpatentable over the ICC Specifications For Payment Systems, in view of the *Renner et al.* patent (U.S. 5,679,945). The Office Action states that the Specification discloses the EMV standard, but does not teach an emulation process. It notes that the *Renner* patent discloses a smart card reader having the ability to emulate magnetic strip readers, barcode readers and Wiegand effect readers, and concludes that it would have been obvious to use the teachings of the *Renner* patent to modify the ICC Specification, on the grounds that "it would be advantageous to mimic routine transactions while retrofitting the operational code for full optimization."

To establish a *prima facie* case of obviousness, MPEP §2143 sets forth three basic criteria that must be met. The first of these criteria is that "there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings."

This section of the Manual goes on to state that the teaching or suggestion to make the claimed combination "must be found in the prior art, not in applicant's disclosure." In the present case, there is no reason apparent from the references why a person of ordinary skill in the art would seek to apply the teachings of the *Renner* patent to the ICC Specification. The Specification defines certain data elements and commands that apply to the exchange of information between an integrated circuit card and a terminal, in the conduct of financial transactions. In contrast, the *Renner* patent is directed to a smart card reader that is designed to replace other (i.e., non-smart card) types of readers, and yet remain compatible with systems that are designed for these other types of readers.

There is no apparent nexus between the two references that would lead one to combine their teachings. While they both relate to smart cards, their objectives are entirely disparate from one another. The Specification is concerned with a set of protocols that enable financial transactions to be performed. On the hand, the *Renner* patent is directed to an item of hardware, namely a smart card reader, that can replace other types of hardware in a transparent manner. Absent knowledge of the present invention, there is no reason to even consider the two references in conjunction with one another.

Nevertheless, even if the teachings of the two references were to be somehow combined, the result would still not lead a person of ordinary skill to the claimed invention. As pointed out in Applicant's previous response, the invention is directed to the emulation of a smart card reader that conforms to the PCSC standard, to enable a personal computer to communicate with a reader that operates according to the EMV standard. The Office Action apparently relies upon the *Renner* patent because it relates to emulation in the context of a smart card reader. However, the *Renner* patent does not teach one how to

implement the particular type of emulation set forth in the claims. Rather, as discussed previously, it discloses a technique that enables a smart card reader to emulate other, non-smart card types of readers. Specifically, it discloses emulation techniques that enable data stored on a smart card to be converted into a Wiegand effect signal, a magnetic stripe signal, or a barcode signal. See, for example, column 5, lines 30-34 and column 9, lines 39-43. Nowhere does the *Renner* patent discuss, or otherwise suggest, emulation of a smart card reader that functions according to the PCSC standard.

The method recited in claim 1 includes, among other steps, that of "emulating the return of a state word in compliance with the standards of the PCSC environment." In conjunction with this claimed subject matter, the Office Action refers to the ICC Specification at page 6-7, section 6.4. However, this portion of the Specification does not disclose, nor otherwise relate to emulation, particularly the emulation of a state word that complies with the PCSC standard. Rather, it is directed to the protection of messages, to maintain security.

The next step recited in claim 1 is that of receiving an APDU command that complies with the state word, when the APDU exchange corresponds to Case 2. The Office Action refers to the ICC specification at page 6-3, sections 6.1.3 and 6.2.1, in connection with this claimed subject matter. To the extent they are relevant to the claim, these sections of the specification define the different cases for command-response pairs. However, they do not specify any relationship between an APDU command and a state word under the standards of the PCSC environment, for Case 2. Again, the Specification does not contain any disclosure relating to the PCSC environment.

Similarly, the reference does not disclose the next claimed step of the method, which is that of receiving the GET-RESPONSE command using the state word, in Case 4. Again, the Office Action only refers to section 6.1.3 of the specification as suggesting this claimed subject matter. However, this section does not identify any relationship between Case 4 and a state word in the PCSC environment.

For similar reasons, the cited references do not suggest the features recited in the other pending claims.

In summary, the ICC Specification pertains to the EMV standard, but does not contain any disclosure relating to the emulation of a PCSC-compatible reader. While the *Renner* patent discloses emulation, per se, in connection with a smart card reader, it also does not contain any teachings relating to the PCSC environment. Consequently, any possible combination of the teachings of these two references could not lead one of ordinary skill in the art to the claimed invention.

Reconsideration and withdrawal of the rejections, and allowance of all pending claims are respectfully requested.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

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By: \_\_\_\_\_



James A. LaBarre

Registration No. 28,632

P.O. Box 1404  
Alexandria, Virginia 22313-1404  
(703) 836-6620